

## Bibliographic Information

**Drawing of plastic laminates with improved gas-barrier property, transparency, and high tensile strength.** Yamamoto, Tomoyuki. (Nippon Synthetic Chemical Industry Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho (1999), 5 pp. CODEN: JKXXAF JP 11198225 A2 19990727 Heisel. Patent written in Japanese. Application: JP 98-13304 19980107. CAN 131:145357 AN 1999:462925 CAPLUS

## Patent Family Information

Patent No.	Kind	Date	Application No.	Date
JP 11198225	A2	19990727	JP 1998-13304	19980107

Priority Application  
JP 1998-13304

19980107

## Abstract

Drawn laminates, useful for packaging materials for foods, drugs, etc. (no data), are prepd. by drawing laminates comprising sapond. ethylene-vinyl acetate copolymer layers and thermoplastic resin layers under microwave irradiation. Thus, a 5-layer laminate film comprising Novatec PP-EG 8 (I; polypropylene), Admer QF 500 (II; adhesive resin), 32:68 ethylene-vinyl acetate copolymer (99.8 mol% sapond.), II, and I at 100/30/30/30/100 ( $\mu\text{m}$ ) thickness ratio was drawn 3.6:1 in the machine direction and then 3.9:1 in the transverse direction under microwave irradiation to give a 17- $\mu\text{m}$  thickness film showing O permeability 3.4 mL/m<sup>2</sup>-day-atm, haze 1.6%, and improved tensile strength.

## Patent Classifications

Main IPC: B29C055-02. Secondary IPC: B29C035-10; B29C055-22; B32B027-28; B29K055-00; B29L009-00.

Indexing -- Section 38-2 (Plastics Fabrication and Uses)

### Microwave

#### Transparent films

(drawing of plastic laminates with improved gas-barrier property and transparency under microwave radiation)

#### Laminated plastics, uses

##### Polyamides, uses

##### Polyesters, uses

##### Polyolefins

Role: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(drawing of plastic laminates with improved gas-barrier property and transparency under microwave radiation)

#### Molding of plastics and rubbers

(drawing; drawing of plastic laminates with improved gas-barrier property and transparency under microwave radiation)

#### Packaging materials

(films, oxygen-impermeable; drawing of plastic laminates with improved gas-barrier property and transparency under microwave radiation)

83137-88-6, Admer QF 500

Role: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
(adhesive layer; drawing of plastic laminates with improved gas-barrier property and transparency under microwave radiation)

9003-53-6, Polystyrene

Role: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
(derivs.; drawing of plastic laminates with improved gas-barrier property and transparency under microwave radiation)

9002-88-4, LDPE

9010-79-1, Novatec PP-EG 8

24937-78-8D, Ethylene-vinyl acetate copolymer, sapond.

25038-54-4, Poly[imino(1-oxo-1,6-hexanediyl)], uses

Role: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
(drawing of plastic laminates with improved gas-barrier property and transparency under microwave radiation)

#### **Supplementary Terms**

drawing laminate packaging material gas barrier; ethylene vinyl acetate copolymer laminate drawing;  
transparent polypropylene laminate microwave radiation drawing; EVOH laminate tensile strength  
oxygen impermeable